Review Comments
State of Oregon Department of Environmental Quality
Source Control Decision
Christenson Oil Company
ECSI # 2426
Dated August 10, 2015

Submitted September 29, 2015

Following are the United States Environmental Protection Agency's (EPA) comments on the August 10, 2015 memorandum with subject line, Source Control Decision, Christenson Oil Company, ECSI # 2426, (SCD Memo) prepared by State of Oregon Department of Environmental Quality (DEQ). The Christenson Oil Company site is located within the City of Portland's Outfall Basin No. 18, which discharges to the Willamette River at approximate RM8.8W. Other documents related to the SCD Memo reviewed by EPA include the following:

- Source Control Evaluation Report, Christenson Oil Company, 3821 N.W. St. Helens Road, Portland, Oregon 97210 (SCE Report). February 19, 2014.

- Stormwater Source Control Evaluation Report – Amendment, Christenson Oil Company, 3821 NW St. Helens Road, Portland, Oregon, ECSI# 2426 (Amendment), prepared by Pacific Crest. November 6, 2014.

Information and results presented in the SCE Report and Amendment serve as the basis for the DEQ source control decision for the Christenson Oil Company site. DEQ concluded that Christenson Oil Company has identified and controlled upland sources of contamination from current and past operations such that contaminant transport pathways at the site do not pose a significant current or future threat to the Willamette River.

General Comments

1. The table below summarizes the information presented in the SCE Report and Amendment as well as EPA's recommendations for the Christenson Oil Company site. Based on current information, EPA is in agreement with DEQ that Source Control Measures (SCMs) implemented at Christenson Oil Company are effectively reducing potential Willamette River recontamination from this site. This conclusion is based on multiple lines of evidence including:

    - Comparison of analytical results to Portland Harbor Joint Source Control Strategy (JSCS) Screening Level Values (SLVs)

    - Comparison of analytical results to 2015 EPA Preliminary Remediation Goal (PRG) values developed for Remedial Action Objectives (RAO) 3 and 7.

- Comparison of results to typical heavy industrial sites using the DEQ charts from *Appendix E: Tools for Evaluating Stormwater Data* of the *Guidance for Evaluating the Stormwater Pathway at Upland Sites* document.

This conclusion is dependent on continued implementation and effectiveness of onsite SCMs. If site conditions change and/or NPDES 1200Z required stormwater sampling results indicate pollutant concentrations are increasing with time, future source control actions may be needed to ensure that the Portland Harbor Superfund Site is not recontaminated from pollutants discharged to the Willamette River from this upland site.

EPA Site Status Summary – Christenson Oil Company

Question	Answer	Description
Are source control measures being implemented?	Yes	SWPCP, SPCC Plan, catch basin filter insert, oil & water separator, secondary containment of tank farm areas.
Are there JSCS SLV exceedances?	Yes	Sediment: Low magnitude SLV exceedances occurred for Phthalates (Bis(2-ethylhexyl)phthalate), PAHs (Indeno(1,2,3-cd)pyrene and Benzo(g, h, i)perylene, and metals (cadmium, lead, and zinc). Stormwater: Low magnitude SLV exceedances occurred for PAHs (Benzo(a)anthracene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene, and Indeno(1,2,3-cd)pyrene, and metals (arsenic, cadmium, copper, lead, manganese, nickel, and zinc).
Are there stormwater PRG exceedances?	Yes	RAO 3: Low magnitude PRG exceedances occurred for PAHs and Arsenic. RAO 7: Low magnitude PRG exceedances occurred for Benzo(a)pyrene, copper, and zinc.
Are pollutant concentrations typical of Portland Harbor industrial sites (e.g. below the knee of the curve)?	Yes	All stormwater results plot below the knee of the curve. Stormwater sediment results also plot below the knee of the curve with the exception of Bis(2-ethylhexyl)phthalate and cadmium which plotted at the knee.
Are stormwater COCs from this site the same as those	Yes	PAHs and metals.

defined for the associated SDU?		
Do sampled stormwater events meet JSCS criteria?	Yes	Four stormwater samples were collected and sample collection conditions met the JSCS criteria.
Is further stormwater data collection recommended?	No	No further SCE stormwater data collection beyond the 1200Z NPDES permit is recommended at this time.
Are additional source control measures recommended?	No	Christenson Oil will continue to implement SCMs in compliance with their NPDES permit.

Specific Comments

1. Section 4.1.1 Facilitated Groundwater Transport: According to Table 5 and Figure 3, there is only 1.3 feet of separation between the bottom of catch basin CB-1 and the groundwater table. A detailed description of CB-1 was not provided, and it is unclear if this catch basin has a sealed bottom. Catch basin CB-1 should be sealed and watertight to prevent infiltration of stormwater into the shallow groundwater table.

2. Section 4.1.3 Stormwater: The SCD Memo states that stormwater conveyance captures approximately 6% of stormwater draining from the site. However, the SCE Report Amendment indicates that 15% of the site is captured by the OWS and subsequently discharged offsite. DEQ should explain or correct this discrepancy. Overall, stormwater discharges from the Christenson Oil Company site make up a small percentage of the total discharge to Outfall 18.